Claims

1. A driving apparatus of a sliding-type portable wireless terminal using a magnetic body, the terminal having a main body and a sub-body adapted to slide along the longitudinal direction of the main body to be opened/closed, the driving apparatus comprising:

a first magnetic body module positioned on the rear surface of the sub-body and having a magnetic body fastened thereon, which has a predetermined polarity and which extends along the longitudinal direction thereof, and

a second magnetic body module positioned on the front surface of the main body and having a magnetic body fastened thereon, which has a predetermined polarity and faces the magnetic body of the first magnetic body module.

2. A driving apparatus of a sliding-type portable wireless terminal using a magnetic body as claimed in claim 1, wherein the magnetic body of the first magnetic body module has a polarity, in both ends thereof, which exerts a drawing force in relation to the magnetic body of the second magnetic body module and another polarity, in the central portion thereof, which exerts a repulsive force in relation to the magnetic body of the second magnetic body module.

3. A driving apparatus of a sliding-type portable wireless terminal using a magnetic body as claimed in claim 1, wherein the first magnetic body module has a first base plate fastened on the rear surface of the sub-body, a pair of sliding guides fastened on a surface

of the base plate and extending along the longitudinal direction of the first base plate, and the magnetic body fastened on a surface of the first base plate.

4. A driving apparatus of a sliding-type portable wireless terminal using a magnetic body as claimed in claim 3, wherein the second magnetic body module has a second base plate adapted to face the first base plate and sliding grooves formed on a surface of the second base plate to be engaged with the sliding guides for sliding, and the magnetic body of the second magnetic body module is fastened on a surface of the second base plate and faces the magnetic body of the first magnetic body module, which is fastened on a surface of the first base plate.

5. A driving apparatus of a sliding-type portable wireless terminal using a magnetic body as claimed in claim 1, wherein the first magnetic body module includes three pairs of N and S poles alternated along the longitudinal direction thereof and the second magnetic body module includes S and N poles so that the sub-body can be stopped in first, second, and third positions as it slides on the main body.

6. A driving apparatus of a sliding-type portable wireless terminal using a magnetic body as claimed in claim 5, wherein the main body has first and second regions defined in series along the longitudinal direction thereof in the lower half portion of the front surface thereof, and the sub-body is adapted to completely cover both the first and second regions when stopped in the first position, to expose only the first

region when stopped in the second position, and to expose both the first and second regions when stopped in the third position.

7. A driving apparatus of a sliding-type portable wireless terminal using a magnetic body as claimed in claim 5, wherein the first magnetic body module has first, second, and third magnetic bodies having the polarity of N and S poles and arranged linearly along the longitudinal direction thereof.

8. A driving apparatus of a sliding-type portable wireless terminal using a magnetic body as claimed in claim 5, wherein the main body has a first region defined in the lower end of its front surface and a second region in the upper end thereof, and the sub-body is adapted to completely cover both the first and second regions when stopped in the first position, to expose the first region when stopped in the second position, and to expose the second region when stopped in the third position.

9. A driving apparatus of a sliding-type portable wireless terminal using a magnetic body as claimed in claim 1, wherein the first and second magnetic body modules are provided with shield members so that the magnetic force from the magnetic bodies, which are fastened thereon, cannot be discharged out of the driving apparatus.

10. A driving apparatus of a sliding-type portable wireless terminal using a magnetic body as claimed in claim 9, wherein the first magnetic body module has a

first base plate fastened on the rear surface of the sub-body, the second magnetic body module has a second base plate fastened on the front surface of the main body and coupled to the first base plate in such a manner that it can slide while facing the first base plate, and the shield members are positioned on respective surfaces of the first and second base plates.

11. A driving apparatus of a sliding-type portable wireless terminal using a magnetic body as claimed in claim 9, wherein the shield members are made of a material chosen from the group comprising a spring steel plate, an electric zinc-plated steel plate, and a silicon steel plate.